

### **REMARKS**

Amendment C is hereby provided after careful consideration of the Examiner's comments set forth in the Office Action mailed June 23, 2009. Claims 1-21, 23-52, and 55-60 remain in the application after Amendment C is entered. Reconsideration of the application is respectfully requested in view of the amendments and remarks provided herein.

### **The Office Action**

Claims 42-52 stand rejected under 35 U.S.C. § 112, second paragraph, for allegedly being indefinite because it is unclear what is meant by "selecting one or more optimized keywords based at least in part on the at least one candidate advertisement."

Claims 1-21, 23-52, 55, 57, and 58 stand rejected under 35 U.S.C. § 102(e) for allegedly being anticipated by U.S. Patent Application Publication No. 2003/0105677 to Skinner.

Claims 56 and 59 stand rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of U.S. Patent Application Publication No. 2003/0055816 to Paine et al.

Claim 60 stands rejected under 35 U.S.C. § 103(a) for allegedly being obvious over Skinner in view of Paine and in further view of U.S. Patent Application Publication No. 2004/0093296 to Phelan et al.

### **The Non-Art Rejections**

#### **Claims 42-52 are Not Indefinite.**

Claim 42, element b) is amended from "selecting one or more optimized keywords based at least in part on the at least one candidate advertisement" to "selecting one or more keywords based at least in part on content of the at least one candidate advertisement selected in a) to optimize the keyword selecting and provide one or more optimized keywords." Paragraph 54 of the specification, for example, shows that support for the phrase "optimized keyword" was provided in the originally-filed specification. As disclosed in the specification, the "keyword selection agent 52

can select optimized keywords: i) based on the content of the advertiser web site 18, ii) for each advertisement in the advertisement database 46 based on the content of the advertisement, iii) based on the frequency that certain keywords are included in queries to the keyword search engine, iv) from information provided by the advertiser feedback database 42 in the keyword search engine 12, v) from information provided via input device 19, and/or vi) from information provided by other relevant sources." Based at least on the foregoing, it is submitted that independent claim 42 is not indefinite. Accordingly, the Applicant respectfully requests that the corresponding § 112, second paragraph rejections of claim 42 and claims dependent thereon (e.g., claims 43-52) for indefiniteness be withdrawn.

### **The Art Rejections**

#### **Claims 1-21, 23-30, 55, and 58 Patentably Distinguish Over Skinner.**

As amended, independent claim 1 is directed to a method that includes "a) selecting at least one candidate advertisement associated with the advertiser; b) selecting an initial plurality of candidate keywords; c) expanding the initial plurality of candidate keywords selected in b) based at least in part on the at least one candidate advertisement selected in a) to form an expanded plurality of candidate keywords; d) creating an advertisement-keyword pair for each candidate advertisement selected in a) and each candidate keyword, wherein each advertisement-keyword pair includes one or more keywords of the expanded plurality of candidate keywords resulting from c); e) estimating a click-through rate for each advertisement-keyword pair created in d); f) calculating a return on advertising investment (ROAI) for each advertisement-keyword pair created in d) based at least in part on the corresponding click-through rate estimated in e); g) calculating an optimized bid for each advertisement-keyword pair created in d) based at least in part on the corresponding ROAI calculated in f); and h) automatically submitting the optimized bids calculated in g) to the competitive bidding process for placement of each candidate advertisement selected in a) in search results lists generated in response to search queries comprising at least one keyword of the expanded plurality of candidate keywords resulting from c)."

Skinner discloses an automated web ranking system that enables advertisers to dynamically adjust pay-per-click bids to control advertising costs. The Skinner system tracks search terms that are used to market an advertiser's product or service in on line marketing media ("OMM"). The Skinner system determines the search term's effectiveness by collecting and analyzing data relating to the number of impressions, the number of clicks, and the number of resulting sales generated by a search term at a given time period. Based on the data collected and the parameters relating to the advertiser's economic factors provided by the advertiser, the Skinner system calculates a maximum acceptable bid for each search term. The Skinner system monitors the web for competitor's bids on an advertiser's search term and places bids which fall below the maximum acceptable bid. See Abstract.

Skinner also discloses that, when an Internet user 32 logs onto an OMM 34, such as a pay-per-click search engine, and enters one of the advertiser's designated search terms, the resulting display of listings will include the advertiser's listing. This display of the Skinner advertiser's listing, referred to as an impression, as well as the time and date of its occurrence are recorded in the OMM database 36. See para 39; FIG. 2.

The Skinner system enables advertisers to maximize their return on advertising spent (ROAS). ROAS is typically dependent on an advertiser's profits from selling a particular service or item. Initially, it is necessary for an advertiser to provide the Skinner system with some preliminary parameters 50 which reveal economic factors particular to an advertiser, such as an initial ROAS value which the advertiser determines must be targeted for, a monetary budget within which the system may work, and reasonable estimate of the expected clicks or actions by a user for a given time period. The Skinner system requests data 52 from the OMM, the tracking engine, and the advertiser's website as soon as possible after impression data is created in the OMM database. The Skinner system then receives data sets 54 from the databases. Once the data is received, the Skinner system sorts and compiles the data sets 56. The Skinner data is sorted by a primary key and according to time periods in which an event or impression took place. All duplicate information is discarded during the Skinner sorting process. The Skinner primary key may be the designated keycode. See para 43; FIG. 3.

Once the Skinner data is sorted, a master data set is compiled 58. The Skinner system then conducts an analysis to identify well defined datasets 60 per keycode. Well defined data includes a Skinner dataset wherein the number of actions recorded for a specified time period exceed a minimum threshold value, because only those search terms which lead to an acceptable number of user actions can yield accurate data regarding the effectiveness of a search term. If the data is not well defined, then the Skinner bid is not changed 62. If the data is considered to be well defined, the Skinner system must calculate a new acceptable maximum bid 64. This can be done by first calculating a new Skinner ROAS value, which is the amount of sales divided by the cost to advertise per keycode per unit of time using the following formula:  $\text{New ROAS} / \text{Goal ROAS} \times \text{current Max bid} = \text{New Max Bid}$ . The goal ROAS value is a value which the Skinner advertiser initially provided and the current maximum bid is either designated by the advertiser or by the system if a similar analysis has already taken place for a different time period. See para 44-46; FIG. 3.

The Skinner system then determines whether or not the keycode can be deemed a good buy 66, or specifically whether or not the newly calculated maximum bid is a justified expense for the advertiser in light of certain profit determining factors. If the keycode is considered a good buy, the Skinner bid is either increased, maintained, or decreased 68. However, if the Skinner keycode is linked to a banner advertisement at set cost, a determination is made to keep the banner advertisement on. If the Skinner keycode is not a good buy, the bid is either maintained, decreased, or removed 70. However, if the Skinner keycode is linked to a banner advertisement at set cost a determination is made to turn the banner advertisement off. This information is then compiled 72 by the Skinner system. See para 47; FIG. 3.

The Skinner system then logs into the advertiser's OMM account to determine competitor's bid amounts 74. The Skinner system can obtain competitor bid information, including the ranking, URL, and cost per click of the competitor, directly from the OMM if the OMM displays such information, otherwise competitor bid information and/or ranking can be obtained thru screen scraping. Once the Skinner system has access to information regarding competitor bids, the system locates the highest ranking competitor having a bid that is less than the newly calculated max bid.

The Skinner system then prepares an insertion order 76 which reflects a bid that is a minimal value, such as one cent above that competitor's bid for a particular search term for a particular time period. The Skinner insertion order is then uploaded to the OMM 78. If the competitor then proceeds to outbid the system by one cent to regain its ranking, the Skinner system will prepare an insertion order bidding one cent above that bid and this process will continue until the newly calculated max bid value is reached. At this time the Skinner system will drop its bid to the original bid value. See para 48; FIG. 3.

Where competitor bid information is not available, the Skinner system may obtain the desired ranking by submitting a bid to the OMM which falls below the newly calculated max bid. The Skinner system will note the ranking obtained and will continuously rewrite the insertion order to reflect varying bids until the desired ranking is achieved. See para 49.

Notably, Skinner does not disclose or fairly suggest a method that includes selecting a candidate advertisement, expanding initial candidate keywords based on the selected candidate advertisement, creating an advertisement-keyword pair, or submitting a bid for placement of each candidate advertisement in search results lists as recited in claim 1. Rather, Skinner deals with bidding on auctioned positions in search results lists. While bids for the auctioned positions in Skinner may be placed by advertiser's, Skinner does not consider the actual listing to be placed in the auctioned position as a variable in the bidding process. Moreover, Skinner implicitly teaches away from candidate keyword expansion because paragraph 39 merely refers to advertiser-designated search terms.

Based at least on the foregoing, it is submitted that claim 1 is patentably distinguished from Skinner. Accordingly, the Applicant respectfully submits that independent claim 1 and claims dependent thereon (e.g., claims 2-21, 23-30, 55, and 58) are currently in condition for allowance.

**Claims 31-39 Patentably Distinguish Over Skinner.**

As amended, independent claim 31 is directed to an apparatus that includes "an advertisement selection logic for selecting at least one candidate advertisement

associated with the advertiser; a keyword identification system for selecting an initial plurality of candidate keywords and for expanding the initial plurality of candidate keywords; an advertisement-keyword selection system in communication with the advertisement selection logic and keyword identification system for creating an advertisement-keyword pair for each candidate advertisement and each candidate keyword, wherein each advertisement-keyword pair includes one or more keywords of the expanded plurality of candidate keywords for estimating a click-through rate for each advertisement-keyword pair and for calculating a return on advertising investment (ROAI) for each advertisement-keyword pair based at least in part on the corresponding click-through rate; and a bid determination system in communication with the advertisement-keyword selection system for calculating an optimized bid for each advertisement-keyword pair based at least in part on the corresponding ROAI and for automatically submitting the optimized bids to the competitive bidding process for placement of each candidate advertisement in search results lists generated in response to search queries comprising at least one keyword of the expanded plurality of keywords."

The June 23, 2009 Office Action generally uses the same reasons for rejection of independent claim 31 as the § 102(e) rejection of claim 1. Therefore, the disclosures of Skinner identified above and the arguments distinguishing claim 1 also serve to patentably distinguish claim 31.

Notably, Skinner does not disclose or fairly suggest an apparatus that selects a candidate advertisement, expands initial candidate keywords; creates an advertisement-keyword pair, or submits optimized bids for placement of each candidate advertisement in search results lists as recited in claim 31. Rather, Skinner deals with bidding on auctioned positions in search results lists. While bids for the auctioned positions in Skinner may be placed by advertiser's, Skinner does not consider the actual listing to be placed in the auctioned position as a variable in the bidding process. Moreover, Skinner implicitly teaches away from candidate keyword expansion because paragraph 39 merely refers to advertiser-designated search terms.

Based at least on the foregoing, it is submitted that claim 31 is patentably distinguished from Skinner. Accordingly, the Applicant respectfully submits that

independent claim 31 and claims dependent thereon (e.g., claims 32-39) are currently in condition for allowance.

**Claims 40 and 41 Patentably Distinguish Over Skinner.**

As amended, independent claim 40 is directed to a method that includes "a) selecting at least one candidate advertisement associated with the advertiser; b) selecting a plurality of candidate publisher web pages, wherein each candidate publisher web page is associated with one or more candidate advertisement selected in a) and includes one or more auctioned advertisement positions; c) creating an advertisement-publisher web page pair for each candidate advertisement selected in a) and each candidate publisher web page selected in b); d) estimating a click-through rate for each advertisement-publisher web page pair created in c); e) calculating a return on advertising investment (ROAI) for each advertisement-publisher web page pair created in c) based at least in part on the corresponding click-through rate estimated in d); f) calculating an optimized bid for each advertisement-publisher web page pair created in c) based at least in part on the corresponding ROAI calculated in e); and g) automatically submitting the optimized bids calculated in f) to the competitive bidding process for placement of each candidate advertisement selected in a) in at least one publisher web page of the plurality of candidate publisher web pages selected in b)."

The June 23, 2009 Office Action generally uses the same reasons for rejection of independent claim 40 as the § 102(e) rejection of claim 1. Therefore, the disclosures of Skinner identified above and the arguments distinguishing claim 1 also serve to patentably distinguish claim 40.

Notably, Skinner does not disclose or fairly suggest a method that includes selecting a candidate advertisement, selecting a candidate publisher web page, creating an advertisement-publisher web page pair, estimating a click-through rate for an advertisement-publisher web page pair, calculating a return on advertising investment (ROAI) for an advertisement-publisher web page pair, calculating an optimized bid for an advertisement-publisher web page pair, or submitting optimized bids for placement of each candidate advertisement in a publisher web page as recited in claim 40. In fact, Skinner does not mention a publisher web page or the like. Rather, Skinner deals with

bidding on auctioned positions in search results lists. While bids for the auctioned positions in Skinner may be placed by advertiser's, Skinner does not consider the actual listing to be placed in the auctioned position as a variable in the bidding process. Moreover, Skinner implicitly teaches away from candidate keyword expansion because paragraph 39 merely refers to advertiser-designated search terms.

Based at least on the foregoing, it is submitted that claim 40 is patentably distinguished from Skinner. Accordingly, the Applicant respectfully submits that independent claim 40 and claims dependent thereon (e.g., claim 41) are currently in condition for allowance.

**Claims 42-52 Patentably Distinguish Over Skinner.**

As amended, independent claim 42 is directed to a method that includes "a) selecting at least one candidate advertisement associated with the advertiser; b) selecting one or more keywords based at least in part on content of the at least one candidate advertisement selected in a) to optimize the keyword selecting and provide one or more optimized keywords; c) creating an advertisement-keyword pair for each candidate advertisement selected in a) and each optimized keyword selected in b), wherein each advertisement-keyword pair includes one or more optimized keywords; d) calculating an optimized bid for each advertisement-keyword pair created in c) based at least in part on the one or more optimized keywords selected in b); and e) automatically submitting the optimized bids calculated in d) to the competitive bidding process for placement of each candidate advertisement selected in a) in search results lists generated in response to search queries comprising at least one keyword of the one or more optimized keywords selected in b)."

The June 23, 2009 Office Action generally uses the same reasons for rejection of independent claim 42 as the § 102(e) rejection of claim 1. Therefore, the disclosures of Skinner identified above and the arguments distinguishing claim 1 also serve to patentably distinguish claim 42.

Notably, Skinner does not disclose or fairly suggest a method that includes selecting a candidate advertisement, selecting keywords based on content of the selected candidate advertisement to optimize the keyword selecting and provide



optimized keywords; creating an advertisement-keyword pair, or submitting the optimized bids for placement of each candidate advertisement in search results lists as recited in claim 42. Rather, Skinner deals with bidding on auctioned positions in search results lists. While bids for the auctioned positions in Skinner may be placed by advertiser's, Skinner does not consider the actual listing to be placed in the auctioned position as a variable in the bidding process. Moreover, Skinner implicitly teaches away from candidate keyword expansion because paragraph 39 merely refers to advertiser-designated search terms.

Based at least on the foregoing, it is submitted that claim 31 is patentably distinguished from Skinner. Accordingly, the Applicant respectfully submits that independent claim 42 and claims dependent thereon (e.g., claims 43-52) are currently in condition for allowance.

**Claim 57 Patentably Distinguishes Over Skinner.**

As amended, independent claim 57 is directed to a computer program product that includes "a computer usable medium having computer readable program code embodied in the medium for causing: i) selection of at least one candidate advertisement associated with the advertiser; ii) selection of an initial plurality of candidate keywords; iii) expansion of the initial plurality of candidate keywords selected in ii) to form an expanded plurality of candidate keywords; iv) creation of an advertisement-keyword pair for each candidate advertisement selected in i) and each candidate keyword, wherein each advertisement-keyword pair includes one or more keywords of the expanded plurality of candidate keywords resulting from iii); v) determination of an optimized bid for each advertisement-keyword pair created in iv); and vi) automatic submission of the optimized bids determined in v) to the competitive bidding process for placement of each candidate advertisement selected in i) in search results list generated in response to search queries comprising at least one keyword of the expanded plurality of candidate keywords resulting from iii)."

The June 23, 2009 Office Action generally uses the same reasons for rejection of independent claim 57 as the § 102(e) rejection of claim 1. Therefore, the disclosures of

Skinner identified above and the arguments distinguishing claim 1 also serve to patentably distinguish claim 57.

Notably, Skinner does not disclose or fairly suggest a computer program product that includes a computer usable medium having computer readable program code embodied in the medium for causing selection a candidate advertisement, expansion of initial candidate keywords, creation of an advertisement-keyword pair, or submission of optimized bids for placement of each candidate advertisement in search results list as recited in claim 57.

Based at least on the foregoing, it is submitted that claim 57 is patentably distinguished from Skinner. Accordingly, the Applicant respectfully submits that independent claim 57 is currently in condition for allowance.

**Claims 56 and 59 Patentably Distinguishes Over the Combination of Skinner and Paine.**

Claims 56 and 59 depend from independent claim 1. Accordingly, claims 56 and 59 are patentably distinct from the combination of Skinner and Paine for at least the same reasons provided above distinguishing claim 1 from Skinner. Based at least on the foregoing, the Applicant respectfully submits that claims 56 and 59 are currently in condition for allowance.

**Claim 60 Patentably Distinguishes Over the Combination of Skinner, Paine, and Phelan.**

Claim 60 depends from claim 59 which in turn depends from independent claim 1. Accordingly, claim 60 is patentably distinct from the combination of Skinner, Paine, and Phelan for at least the same reasons provided above distinguishing claim 1 from Skinner and claim 59 from the combination of Skinner and Paine. Based at least on the foregoing, the Applicant respectfully submits that claim 60 is currently in condition for allowance.

**CONCLUSION**

For the reasons detailed above, it is submitted that all claims remaining in the application (Claims 1-21, 23-52, and 55-60) are now in condition for allowance. The foregoing comments do not require unnecessary additional search or examination.

☒ Remaining Claims, as delineated below:

(1) FOR	(2) CLAIMS REMAINING AFTER AMENDMENT LESS HIGHEST NUMBER PREVIOUSLY PAID FOR		(3) NUMBER EXTRA
TOTAL CLAIMS	57	-57 =	0
INDEPENDENT CLAIMS	5	- 6 =	0

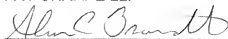
☒ This is an authorization under 37 CFR 1.136(a)(3) to treat any concurrent or future reply, requiring a petition for extension of time, as incorporating a petition for the appropriate extension of time. The appropriate fee for a petition for a 1-month extension of time associated with this submission of Amendment is being paid by credit card via the EFS Web concurrent with this submission.

☒ The Commissioner is hereby authorized to charge any filing or prosecution fees which may be required, under 37 CFR 1.16, 1.17, and 1.21 (but not 1.18), or to credit any overpayment, to Deposit Account 24-0037.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call Alan C. Brandt, at Telephone Number (216) 363-9000.

Respectfully submitted,

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